



Natural Resources Conservation Service  
P.O. Box 2890  
Washington, D.C. 20013

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Date: **May 13, 2004**

Subject: **May 1, 2004 Western Snowpack Conditions and Water Supply Forecasts**

The following information is provided for your use in describing climate and water supply conditions in the West as of May 1, 2004.

## **OVERVIEW**

April saw the continuation of warm spring temperatures and below average precipitation in the Pacific Northwest and most of California. As a contrast to the warm and dry conditions, a series of storms brought above average precipitation to Arizona, New Mexico, southern Utah, southern Colorado and western Wyoming, with some late season snow accumulation above 10,000 feet that melted rapidly. End of season snowpacks are well below average in the Southwest, Intermountain West and Central Oregon. Above average snowpacks are reported in Pecos and Canadian River Basins of northern New Mexico and southern Colorado.

Seasonal runoff forecasts for most western basins in the Pacific Northwest and Intermountain West declined from the April 1 forecasts due to below average April precipitation. The largest declines occurred again in the Colorado, Snake and Great basins, where the warm temperatures and low April precipitation amounts once again combined to reduce seasonal snowpacks. In Utah, and parts of surrounding states, drought is entering its fifth year. Dry soils will soak up much of the remaining snowmelt.

As of May 1, reservoir storages for Arizona, Nevada, New Mexico, Oregon, Utah and Wyoming are below historic averages. Reservoir storages for California, Idaho, and Montana are near historic averages and Washington reports above average reservoir storage.

## **SNOWPACK**

The May 1, 2004 snowpack map reflects generally below average snowpacks westwide (Figure 1). Snowpacks are less than 50% of average in most Southwest basins, Nevada, the Intermountain West, central Oregon, central Idaho, central Washington, and the eastern slopes of the Rockies in Wyoming and Montana. Above average late season snowpacks are reported in Pecos and Canadian River Basins of northern New Mexico and southern Colorado.

Most Alaska snowpacks are in the 70% to 90% range, western Alaska snowpacks vary from 50% to 70% of average, northern slope snowpacks range from 90% to 110% of average, and southern coastal basin snowpacks vary from 90% to 110% of average.

A map containing a daily update of the westwide snowpack may be obtained from the following URL - [http://www.wcc.nrcs.usda.gov/water/w\\_qnty.html](http://www.wcc.nrcs.usda.gov/water/w_qnty.html)

## **MONTHLY AND SEASONAL PRECIPITATION**

April precipitation was extremely low, less than 50% of average, in western Washington, central California, western Nevada, southeastern Oregon and southwestern Idaho (Figure 2). In contrast, much of the Southwest, including southern Utah and southern Colorado reported much above, greater than 150% of average, precipitation. The rest of the West reported amounts near or slightly below average.

Seasonal precipitation for the period October 1, 2003 to April 30, 2004 is generally near to slightly below average for basins in the California, the Intermountain West, interior Pacific Northwest and Rockies (Figure 3). Parts of western Oregon, western Washington, northern California, southern Nevada, north central Montana and New Mexico are reporting above, or much above, average seasonal precipitation. Alaska precipitation is near or above average in most western basins and near to below average in central and southern Alaska.

## **SPRING AND SUMMER STREAMFLOW FORECASTS**

As of May 1, 2004, a majority of basins in the West will receive below average spring and summer streamflows (Figure 4). Seasonal runoff forecasts for most western basins in the Pacific Northwest and Intermountain West declined from the April 1 forecasts due to below average April precipitation. The largest declines occurred again in the Colorado, Snake and Great basins, where the warmest temperatures and the lowest April precipitation amounts once again combined to reduce seasonal snowpacks. In Utah, and parts of surrounding states, drought is entering its fifth year. Dry soils will soak up much of the remaining snowmelt.

Many basins in Utah, Nevada, southern Idaho, southeastern Oregon, southwestern Wyoming and the South Platte River in Colorado, the North Platte River in Colorado and Wyoming, and the Bear River of southeastern Idaho are forecast to receive well below average, less than 50% of normal, spring and summer streamflows,. Most basins in the Pacific Northwest, northern Rockies of Montana and Idaho, northern Nevada, portions of Utah, and central California are forecast to receive spring and summer streamflows ranging from 50% to 90% of average. Western Alaska streamflows are forecast to be slightly below average and near average in central Alaska.

Specific state streamflow summaries can be obtained from the Internet location - <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>

## **RESERVOIR STORAGE**

As of May 1, reservoir storages for Arizona, Nevada, New Mexico, Oregon, Utah and Wyoming are below historic averages (Figure 5). Reservoir storages for California, Idaho, and Montana are near historic averages and Washington reports above average reservoir storage.

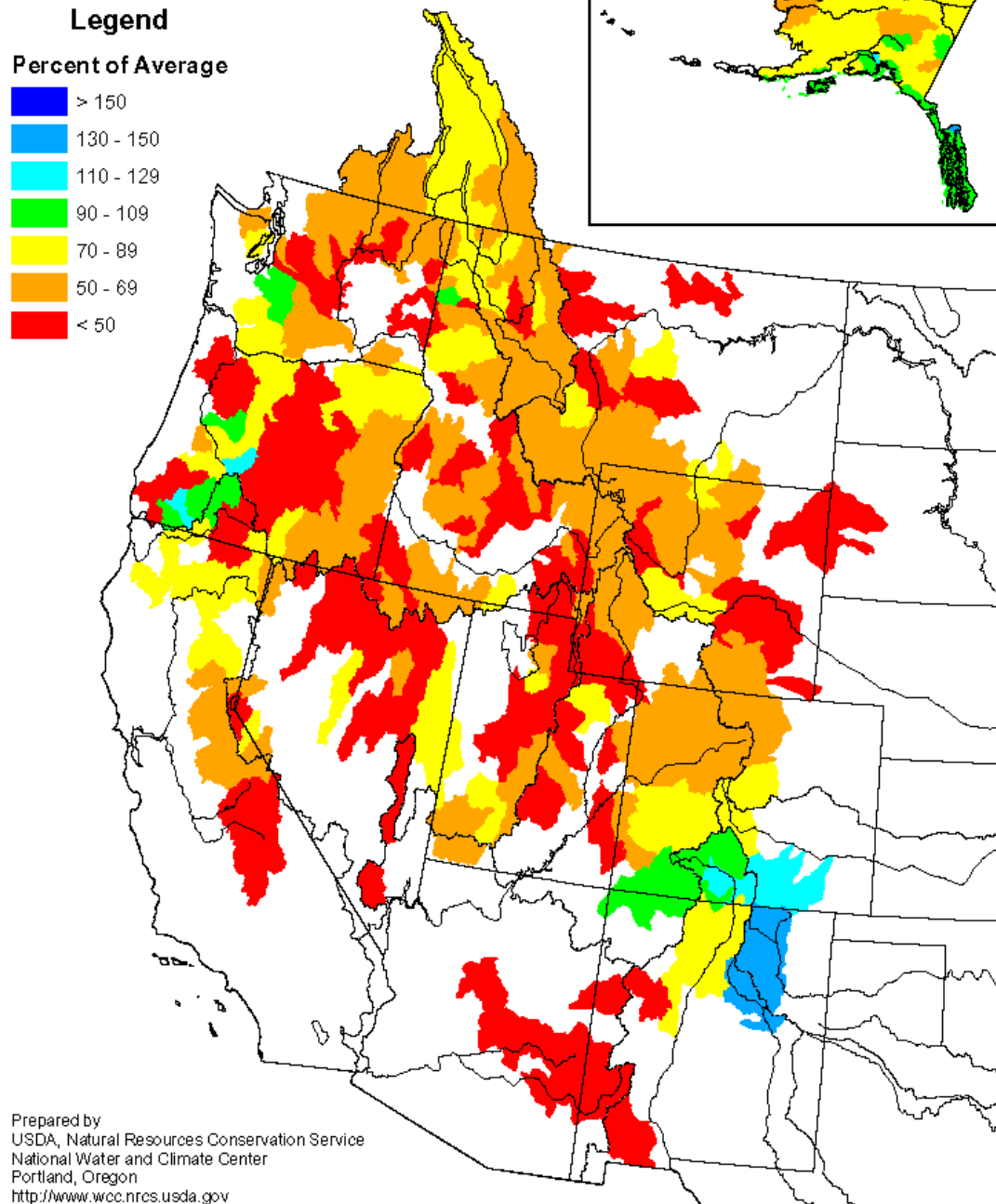
## **FOR MORE INFORMATION**

The National Water and Climate Center Homepage provides the latest available snowpack and water supply information. Please visit us at <http://www.wcc.nrcs.usda.gov>

/s/ RON MARLOW

Director, Conservation Engineering Division, Natural Resources Conservation Division,  
Washington, DC

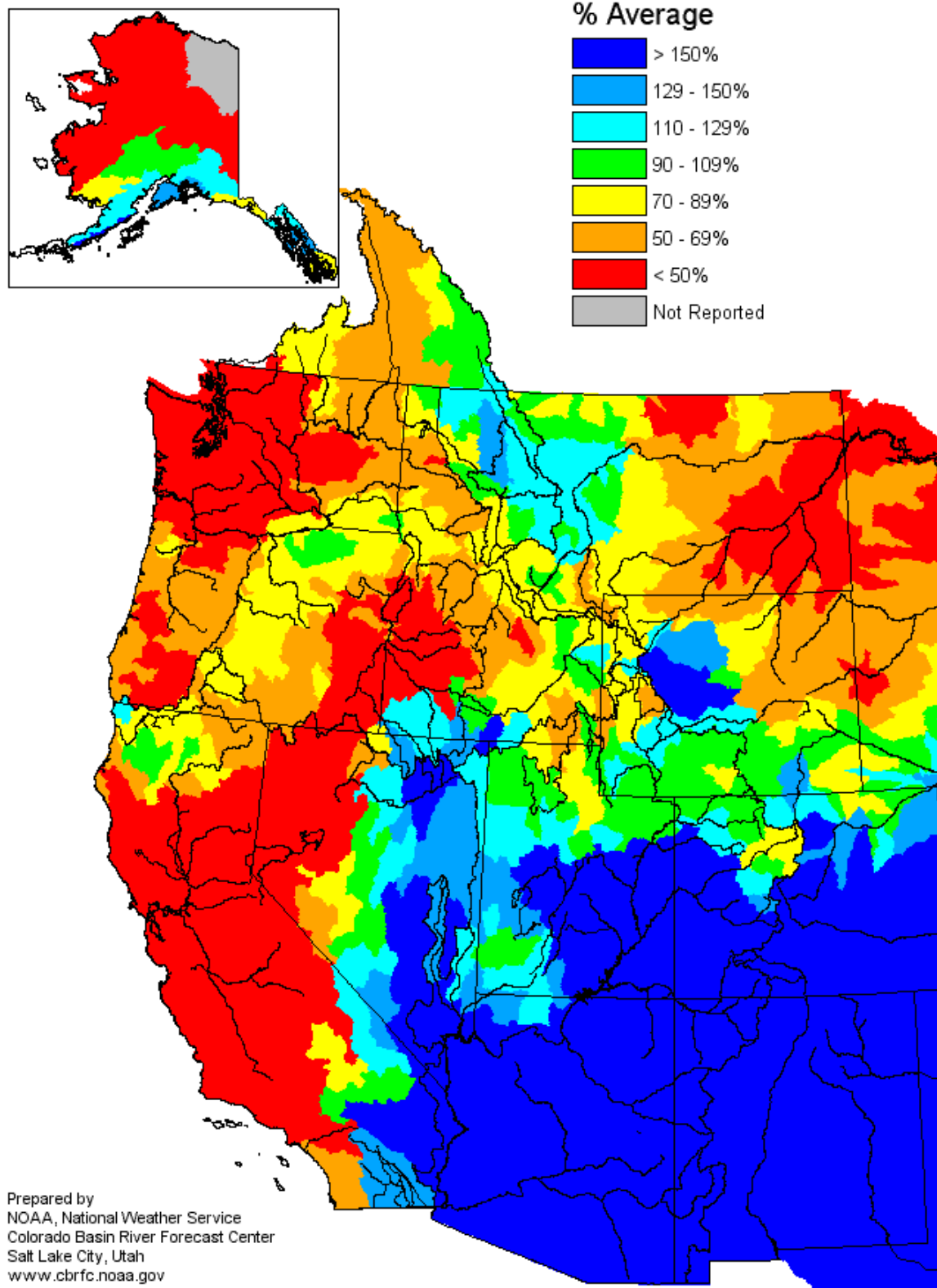
## Mountain Snowpack as of May 1, 2004



**Figure 1. Mountain Snowpack, May 1, 2004**

## Monthly Precipitation for April 2004

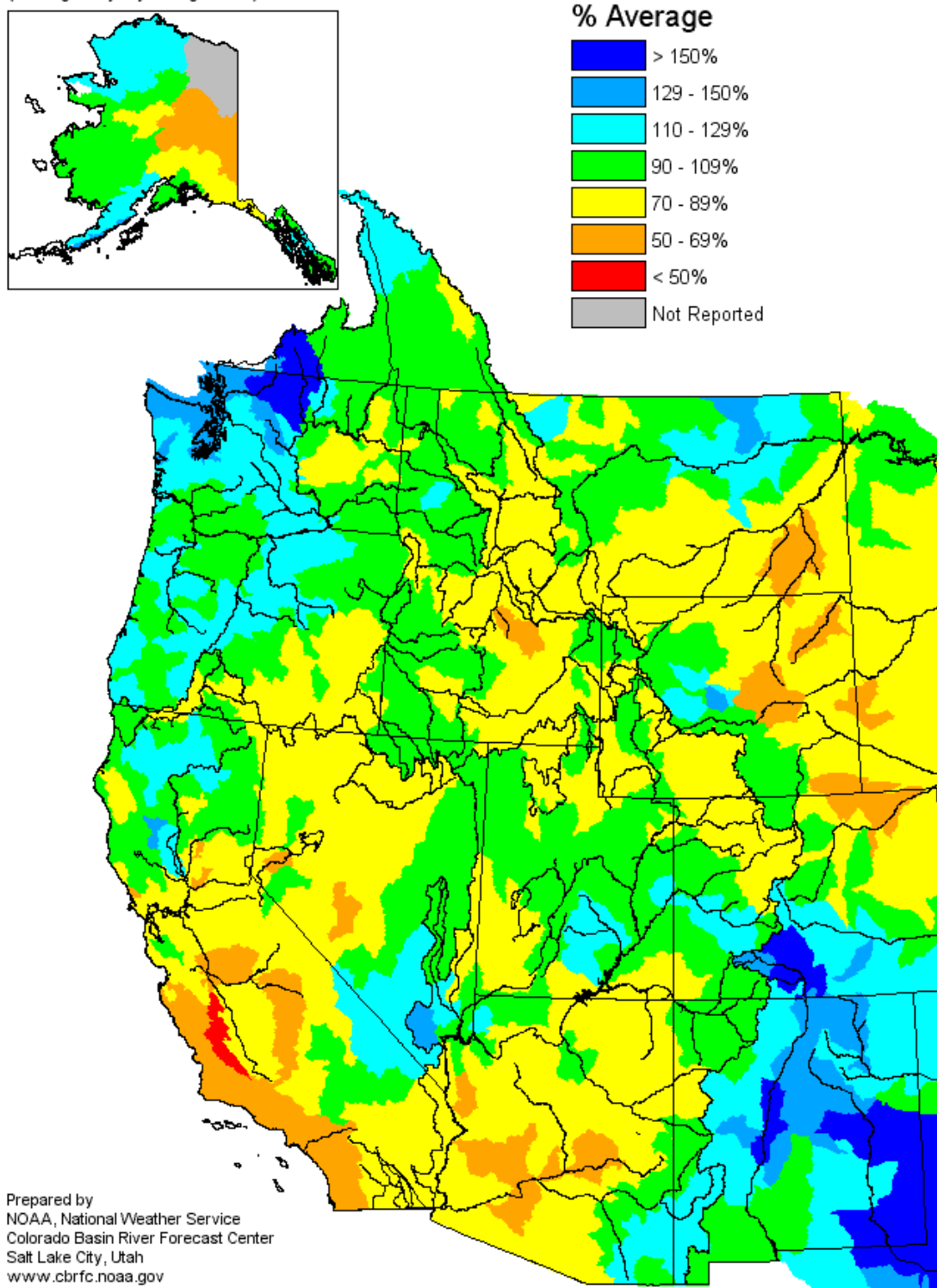
(Averaged by Hydrologic Unit)



**Figure 2. April 2004 Precipitation**

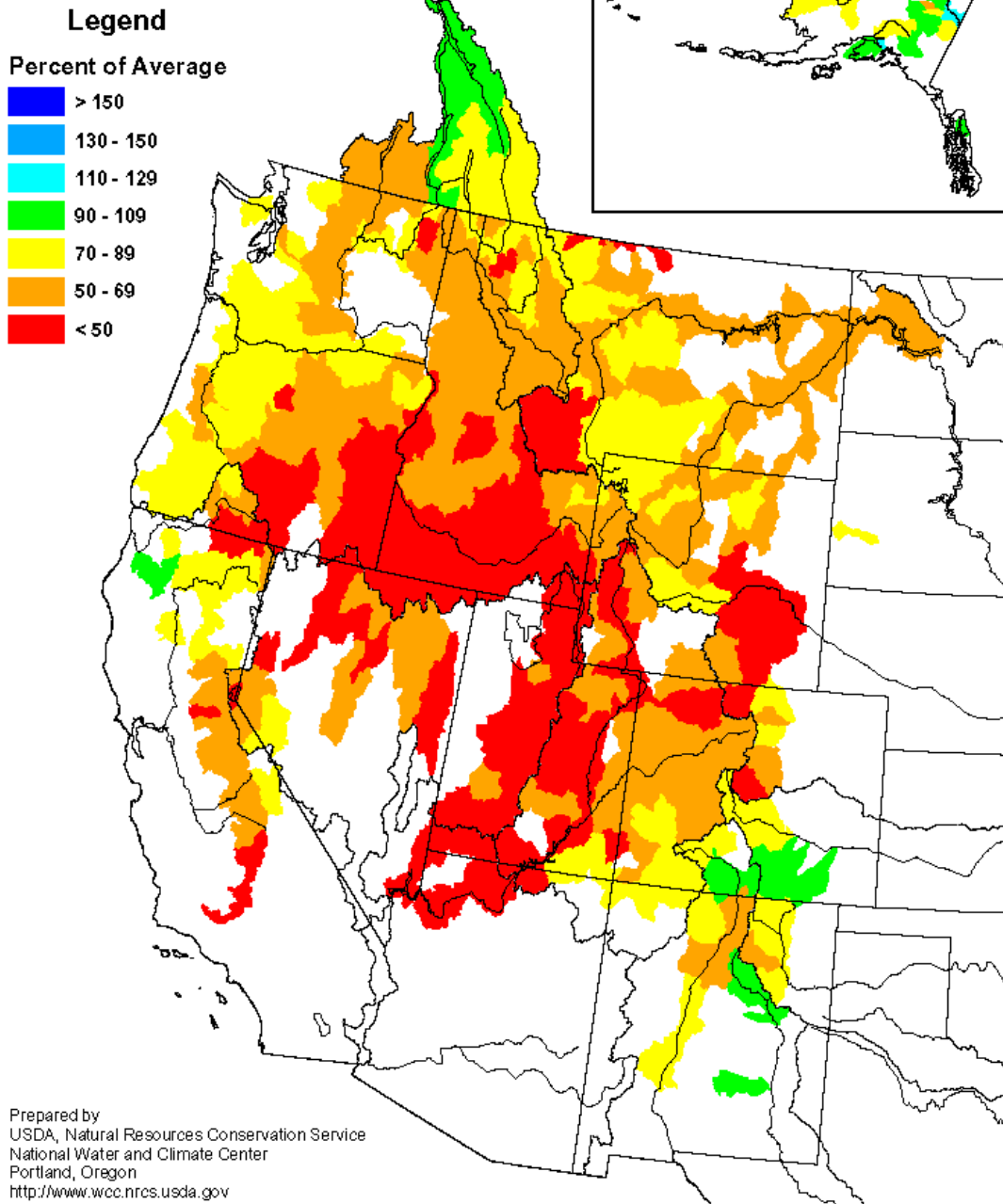
## Seasonal Precipitation, October 2003 - April 2004

(Averaged by Hydrologic Unit)



**Figure 3. Seasonal Precipitation, October 1, 2003 to April 30, 2004**

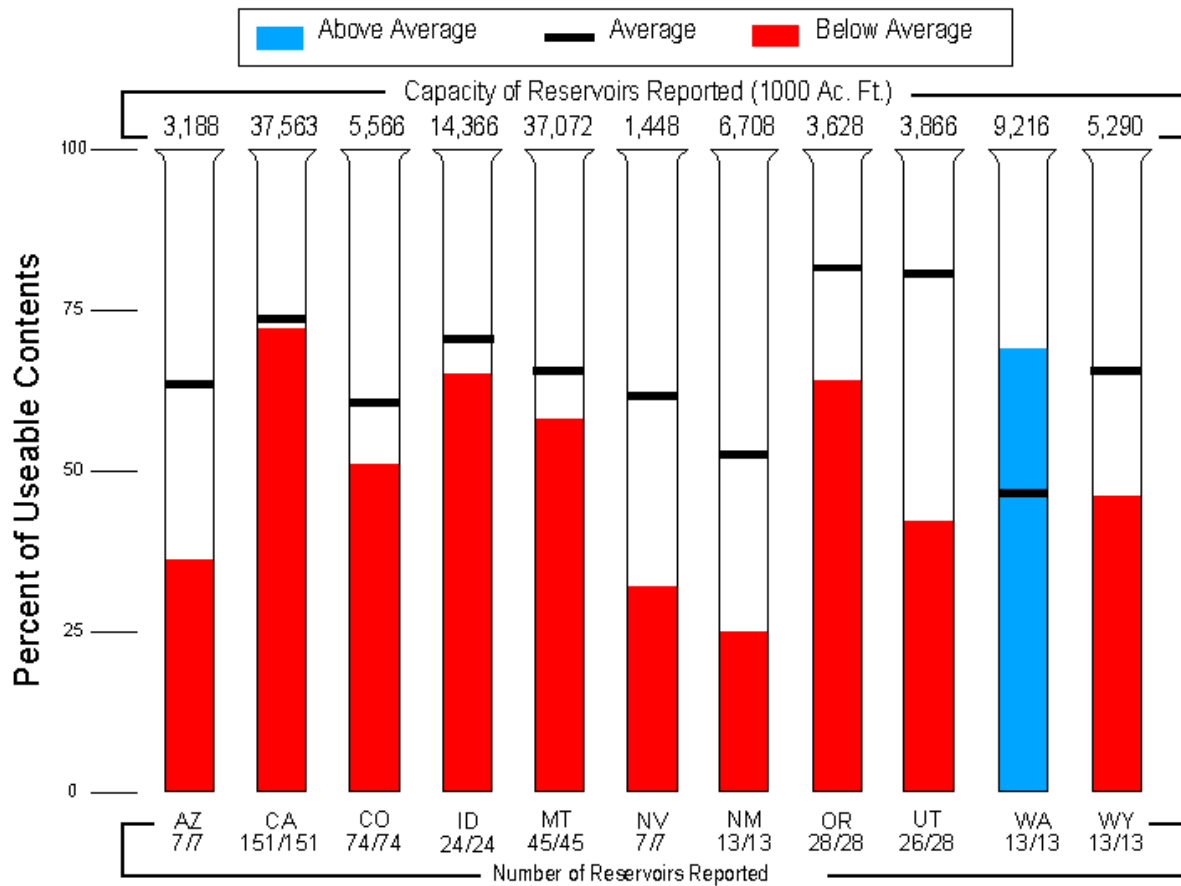
### Spring and Summer Streamflow Forecasts as of May 1, 2004



Prepared by  
USDA, Natural Resources Conservation Service  
National Water and Climate Center  
Portland, Oregon  
<http://www.wcc.nrcs.usda.gov>

**Figure 4. Seasonal Water Supply Forecasts - May 1, 2004**

## Reservoir Storage as of May 1, 2004



Prepared by: USDA, Natural Resources Conservation Service, National Water and Climate Center, Portland, OR  
<http://www.wcc.nrcs.usda.gov>

**Figure 5. Reservoir Storage - May 1, 2004**